Amendments to the Claims:

Listing of Claims:

Please amend the claims as indicated in the following listing of all claims:

1-6. **(Canceled)**

7. **(Currently Amended)** A soft-start charge pump circuit, comprising:

a clock amplitude modulator for generating at least one amplitude modulating clock signal whose amplitude gradually changes from an activation value during an amplitude modulation period, the amplitude modulation period lasting longer than a period of the at least one amplitude modulating clock signal by one or more metric orders; and

a charge pump, driven by the at least one amplitude modulating clock signal, for converting a supply voltage source to a pumping voltage, wherein:

the charge pump is activated by the at least one amplitude modulating clock signal with the amplitude of the activation value such that an absolute value of the pumping voltage thus generated is relatively small, the charge pump after the activation being controlled in such a way that the absolute value of the pumping voltage gradually changes along with the modulation of the amplitude of the at least one amplitude modulating clock signal,

wherein the clock amplitude modulator includes:

a soft-start controller for generating a soft-start control signal, and

a level shifter for modulating the amplitude of the at least one amplitude modulating clock signal in response to the soft-start control signal,

wherein the soft-start controller includes:

a switch capacitor equivalent resistor having a first terminal and a second terminal, the first terminal being connected to the supply voltage source, and

a charging capacitor connected between the second terminal and a ground

potential such that the soft-start control signal is asserted at the second terminal.

8-14. **(Canceled)**

15. **(Currently Amended)** The soft-start charge pump circuit according to claim 7[[11]], wherein:

the level shifter includes:

at least one clock channel for respectively generating the at least one amplitude modulating clock signal, each of the at least one clock channel having an output stage inverter whose power supply terminal is coupled to receive the soft-start control signal, thereby respectively controlling the amplitude of the at least one amplitude modulating clock signal.

16. **(Original)** The soft-start charge pump circuit according to claim 15, wherein:

each of the at least one clock channel further includes:

an input stage inverter having a power supply terminal coupled to receive the supply voltage source for providing a constant amplitude clock signal to the output stage inverter.

17-20. **(Canceled)**